CITY OF RIO RANCHO

UTILITIES COMMISSION POLICY STATEMENT

NUMBER: 501

TITLE: GUIDELINES FOR ISSUING WATER & WASTEWATER LETTERS

OF AVAILABILITY

EFFECTIVE DATE: MAY 17, 2000

REPLACES: NEW

GENERAL

1. Reason(s) why the Commission Policy is needed:

- A. Capacity of the present system is limited the possibility exists that more supply may be requested, than can be provided.
- B. Capital improvement projects may be required to service some areas where present infrastructure is non-existent or at capacity.
- C. Development in some areas may be less desirable than in other areas.
- 2. The issue(s) being addressed:
 - A. Minimum size of proposed subdivision the Utilities Commission may want to directly approve or disapprove.
 - B. Criteria for determining what (if any) capital improvement projects are justified when made necessary by the proposed new development.
- 3. Definitions necessary to the understanding of the Commission Policy:
 - A. Letter of Availability A formal business letter issued by the Utilities Department stating that the City will make water and/or sanitary sewer services available to a specific development. The letter stipulates a period of validity, during which construction must be started and completed. Certain public infrastructure improvements may be required at the owner/developer's cost. These improvements are not necessarily specified, as the owner/developer's distribution system requires only approval by the Utility Department the City does not provide the design. The Letter of Availability does not provide for water or wastewater lines to, or connections at the owner/developer's property line.
- 4. A specific policy statement which guides decisions and actions at the Commission level and provides direction to the day-to-day management of the Utilities Department:
 - A. See text following general outline.

- 5. Formal citations of authority for the Commission Policy, if applicable:
 - A. Existing Commission Policy 201 entitled "Initiation, Maintenance, and Administration of City of Rio Rancho Utilities Commission Policy and Management Directives"

TEXT

All proposed development within the City of Rio Rancho shall require a Water and Wastewater Availability Statement Approved by the Utilities Commission and issued by the City's Department of Utilities. This Availability Statement requirement shall also apply to any new subdivision plats, replats or site plans submitted to the City for approval. The Availability Statement shall be issued only after the development's water and wastewater infrastructure needs have been thoroughly identified by the developer.

Specifically, the Availability Statement shall be based on both water and wastewater infrastructure needs. Water infrastructure needs shall include water line extensions that must be constructed to either meet required fire flows or to be in accordance with the City's Water Master Plan. The sewer infrastructure needs as addressed in the Availability Statement shall include line capacity as well as the actual treatment capacity available at the respective wastewater treatment plant that will receive the proposed development flows. The wastewater infrastructure for the proposed development shall also meet the needs identified in the City's Wastewater Master Plan. In addition, any time constraints for development plans, or requirement for annexation to receive services, shall be identified in the Statement. The Availability Statement shall expire in one year if construction has not started. Construction shall be completed within three years, unless development build-out time is approved for a longer period, as stipulated in the Availability Statement. A longer buildout time shall require a prescribed minimum number of units to be completed yearly.

The Utilities Department staff is authorized to issue Availability Statements for subdivisions with 24 or fewer lots.

AVAILABILITY STATEMENT REQUESTS

A request for an Availability Statement should be made as early as possible in the planning of a project to allow sufficient time for response and to enable the developer to include the required water and sewer infrastructure in the project plans. Requests for Availability Statements shall include the following information:

- 1. The precise location of the proposed development, consisting of location map and legal description of the property.
- 2. The type of development proposed, such as single family residential, shopping center, office, etc., with a proposed schedule of development or phasing, if applicable. A sketch plat shall also be submitted.
- 3. The scope and size of the project by phase, e.g. the number of units in a residential

project, number of beds in a nursing facility, square footage of a shopping center or industrial development, etc.

4. The City of Rio Rancho Fire Marshall's written approval of proposed fire hydrant(s) location(s).

All requests for Availability Statements for Water and Wastewater Services should be addressed to:

City of Rio Rancho Department of Utilities 3900 Southern Blvd., Suite 100 Rio Rancho, NM 87124 Tel: (505) 891-1200

In cases of complicated or very large development proposals, additional study time by the Department of Utilities may be required in order to prepare an Availability Statement. In such cases, the requester will be notified of the extra time needed and advised of the status of the Availability Statement.

Where a proposed project is not sufficiently defined to provide all of the information required for an Availability Statement, the developer may request a serviceability letter. This serviceability letter will identify the water and sewer utilities nearest to the property and to ascertain the general feasibility of the project. However, in no case shall a serviceability letter replace the need for an Availability Statement.

No water and wastewater service account shall be sold to any development project prior to issuance of the Availability Statement for Water and Wastewater Service for that specified project.

A sample of an Availability Statement request is enclosed as an attachment to this handout.

WATER & WASTEWATER FLOWS

In response to an Availability Statement request, the City will determine the projected water and wastewater needs for the proposed development. These projected water and wastewater flows will be broken out by development phase, and will be based on City of Rio Rancho design criteria.

The following sections describe the design criteria first for water and then for wastewater flows.

Water System Design Criteria

The water infrastructure for all proposed commercial, industrial, and residential developments shall, at a minimum, be sized to provide Peak Day Water Demand flows plus fire flow protection. The fire flow requirement shall apply to both private sprinkler

systems and public fire hydrants. The actual fire flow requirements will be based on factors such as type of development (homes, schools, hospitals, shopping centers, etc.) as well as the type of construction to be used for the development (wood framing, concrete masonry unit, etc.).

The Peak Day Water Demand flow for residences within the Rio Rancho water utility service area shall be calculated based on the following formula:

Peak Day Water Demand = 650 gallons per capita per day (gpcpd)

The population loading used in the above formula, for both R-1 single family homes and for higher density housing (including apartments) is as follows:

- (2.5 persons)/(dwelling unit) for apartments, townhouses and condominiums
- (2.78 persons)/(dwelling unit) for all R-1 single family homes

Wastewater System Design Criteria

For all types of development in the City of Rio Rancho, the following design criteria shall apply in order to determine the applicable projected wastewater flows generated by the proposed development.

In all residential areas, the population of the contributing area and the design flows are calculated as follows:

Population loading

(2.5 persons) /(dwelling unit) for apartments, townhouses and condominiums

(2.78 persons)/dwelling unit) for all R-1 single family homes

Design flow calculation

Average Flow = [80 X (Population)]/(10⁶) in millions of gallons per day, MGD

Peak Flow = 2.0 X (Average Flow), in MGD

Design Flow = 1.2 X (Peak Flow), in MGD

In non-residential areas, design flows are determined by land use type. The following is a summary of estimated demands by land use type used for the City of Rio Rancho Wastewater Master Plan as of November, 1996:

Land Use Category	Avera	ge Flow	(gpd/acre)	Peak Flow (gpd/acre)		
Light Commercial		1,230		1,6	521	
Heavy Commercial	e de	5,968		7,6	500	
	33					
Light Institutional		. 226			310	
Heavy Institutional		1,788		2,4	148	
Light Industrial		447		7	45	
Medium Industrial		1,680		1,9	82	
Heavy Industrial	10.00	9,266		10,3	00	

The calculated flows as described above will be used to analyze the existing wastewater infrastructure that will accept flows from a proposed development. These calculated flows will be applied as follows:

The calculated peak flow conditions will be used only to check the capacity of any existing infrastructure affected by the proposed development. For example, if the proposed development involves adding additional housing units to an existing subdivision, the predicted peak flows will be used to check the capacity of the in-place wastewater collection system in the existing subdivision.

The calculated design flows will be used to size any interceptors that may be required within the proposed development in order to handle off-site flows which may tie into the proposed development system. By using these calculated design flows, there will be adequate capacity in the proposed interceptors to provide for future upstream development. In general, the flow depth/pipe diameter (d/D) ratio to be used in the sizing of new interceptor lines shall not be greater than 0.80.

If a lift station is required in order to access an existing interceptor system, and the lift station will be placed to accept any future development flows, then the lift station will be sized to the predicted <u>design flows</u>. If the lift station will not accept future development flows, then the lift station may be sized based on the calculated <u>peak flows</u> from the area contributory to the lift station.

The calculated peak flow rates will be used to determine impacts to the City's wastewater treatment facilities. In no cases will a collector line smaller than 8" diameter be considered in determining infrastructure needs. Minimum slope for an 8" line is 0.0040 ft/ft.

--SAMPLE--SAMPLE--SAMPLE--SAMPLE--SAMPLE--SAMPLE--

September 21, 1999

Department of Utilities 3900 Southern Blvd. SE, Suite 100 Rio Rancho, NM 87124

RE: Availability Statement Request for Water and Wastewater Services Proposed Porter Hts. Subdivision

To Whom It May Concern:

This letter is to request an Availability Statement for a proposed subdivision on 6th Avenue between Englum and 40th Street NE. The property is Lot 2 through Lot 12 in Unit 13, Block 96. The property is zoned for R-T density, and is approximately 6 acres in size (LOCATION MAP TO BE INCLUDED).

The proposed subdivison will have a layout approximately as shown on the enclosed sketch plat (SKETCH PLAT TO BE INCLUDED), and will consist of approximately 64 single family residential lots.

The project is planned is to built in one phase, with no commercial areas.

If you have questions or need additional information, please call.

Sincerely,

Joe Developer

--SAMPLE--SAMPLE--SAMPLE--SAMPLE--SAMPLE--SAMPLE--

Mr. Joe Developer 1313 Mockingbird Ln. Rio Rancho, NM 87124

RE: Availability Statement Request for Water and Wastewater Services Proposed Porter Hts. Subdivision

Sir,

This Statement of Availability is issued in response to your Availability Statement request of September 21, 1999. Statements made in this letter are contingent upon the information provided in that request, and are subject to any final zoning and/or planning review.

Subject Property: Approximately 6 acres on 6th Avenue, between Englum and 40th Street NE.

Proposed Development: High density single family residential development. 64 dwelling units on individually platted lots on internal private roadways with access to 6th Avenue.

Water: An 8-inch water line is currently scheduled for installation in 6th Avenue under the City of Rio Rancho Water Master Plan in 1997. As per Rio Rancho design criteria, the following was used to calculate the Peak Day Water Demand for your project:

[(2.78 persons)/(dwelling unit)][64 dwelling units] = 178 persons

(650 gpcpd)(178 persons) = 116,000 gpd

Based on the above, water service for the proposed development will be contingent on construction of an 8-inch line looped through the internal roads to connect with the proposed 8-inch line in 6th Avenue. Separate service connections will be required for each platted lot/dwelling unit. Fire hydrants will be installed and spaced as required by the City Fire Marshall.

--SAMPLE--SAMPLE--SAMPLE--SAMPLE--SAMPLE--SAMPLE--

Wastewater: An 8-inch sanitary sewer (SAS) line is currently scheduled for installation in 6th Avenue under the City of Rio Rancho Wastewater Master Plan in 1997. As per Rio Rancho design criteria, the following was used to calculate the wastewater flows generated by the proposed development.

[2.78 persons]/(dwelling unit)][64 dwelling units] = 178 persons

Average Flow = $[80 \times (178 \text{ persons})/(10^6)] = 0.014 \text{ MGD}$ Peak Flow = $2.0 \times 0.014 \text{ MGD} = 0.028 \text{ MGD}$ Design Flow = $1.2 \times 0.024 \text{ MGD} = 0.034 \text{ MGD}$

The 8-inch 6th Avenue SAS will have the capacity required to carry the peak flows generated by the proposed development. There is also adequate capacity at Wastewater Treatment Plant #2 to treat the calculated peak wastewater flows generated by the development. Wastewater service, however, will be contingent on construction of an 8-inch collector line within the proposed development, with service provided to individually platted lot/dwelling unit by 4-inch lines. This 8-inch collector line has the capacity to convey the design flows calculated for the proposed development.

This Availability Statement will remain in effect for one year, during which time construction shall be started. Construction shall be completed in three years, or reapplication for availability will be required. This Availability Statement applies only to the development identified in the Availability Statement Request. Its validity is in part contingent upon the continuing accuracy of the information supplied by the developer. Changes in the proposed development may require re-evaluation of availability and should be brought to our attention as soon as possible.

If you have any questions or comments, please contact the City of Rio Rancho Utility Department.

Sincerely,

Ronald Reviewer
City of Rio Rancho Utility Dept.

Recommended for Commission			Hay Wwell	
Approval			Utilities Director	
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Recommended for Adoption			Henry Jacelle	15
			Chairman W	
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Adopted and Issued this 17th day of May, 2000

James Jimenez, City Administrator